

CLAIM AMENDMENTS:

Please amend the claims as follows:

1. (Currently amended) An electric device, including a casing, an electric circuit, ~~with a heat generating component~~ and at least one fan,

(a) said electric circuit being implemented on a printed circuit board where at least one heat generating component is a part of the electric circuit, the heat generating component being in thermal contact with a wall portion of the casing,

(b) the casing being substantially a cuboid in shape including a U-shaped bottom and a U-shaped cover having an angled part of said U-shaped bottom and an angled part of said U-shaped cover forming a double wall portion of the casing including a double wall portion with an inner wall portion and an outer wall portion defining an air duct between the inner wall portion and the outer wall portion,

(c) said air duct having an inlet and an outlet and leading from a front surface to a rear surface of said casing, said heat generating component being in thermal contact with the inner wall portion, said double wall portion being a heat sink and said at least one fan being arranged such that an air flow produced by said at least one fan is directed through said air duct.

2. (Previously presented) The device according to claim 1, characterized in that said casing is made of a metal with a high coefficient of thermal conductivity.

3. (Currently amended) The device according to claim 1, characterized in that ~~said casing is substantially a cuboid in shape and includes a~~ said bottom and ~~[[a]]~~ said cover ~~fitted are fit~~ together in thermal contact, said inner wall portion being a part of said bottom, said outer wall portion being a part of said cover, ~~said circuit being implemented on a printed circuit board and the printed circuit board being mounted on the bottom.~~

4. (Previously presented) The device according to claim 3, characterized in that it includes thermal paste between contacting parts of the bottom and the cover, said bottom and said cover being fastened together by fasteners.

5. (Previously presented) The device according to claim 3 or 4, characterized in that said bottom includes a base plate and a bottom side plate and in that said cover includes a

top plate and a cover side plate, said bottom side plate forming said inner wall portion, said cover side plate forming said outer wall portion and said printed circuit board being mounted substantially parallel to said base plate.

6. (Currently amended) The device according to claim 5, characterized in that said cover side plate forms a lateral surface of said substantially cuboid casing, ~~said air duct leading from a front surface to a rear surface of said casing.~~

7. (Currently amended) The device according to claim 6, ~~characterized in that said air duct has an inlet,~~ said inlet being formed by an end portion of said bottom side plate that is bent to an inner side of the casing to increase the air flow through said air duct, said at least one fan being arranged on the front surface of said substantially cuboid casing covering said inlet at least partially.

8. (Previously presented) The device according to claim 1, characterized in that an additional heat sink is mounted within the air duct, being in thermal contact with said double wall portion.

9. (Previously presented) The device according to claim 1, characterized in that said heat generating component is a power semiconductor.

10. (Previously presented) The device according to claim 1, characterized in that it includes at least two fans, the casing including a second double wall portion with an inner wall portion and an outer wall portion defining a second air duct, said second double wall portion being a second heat sink and said at least two fans being arranged such that an air flow produced by said at least two fans is directed through said air ducts respectively.

11. (Previously presented) The device according to claim 10, characterized in that said casing is substantially a cuboid in shape and has two lateral surfaces, each air duct being arranged along one of said lateral surfaces respectively and leading from a front surface of the substantially cuboid casing to a rear surface of the casing.

12. (Currently amended) A casing for an ~~electrical~~ electric device of the kind including an electric circuit, ~~with a heat generating component~~ and at least one fan,

(d) said electric circuit being implemented on a printed circuit board where at least one heat generating component is a part of the electric circuit,

(e) the casing characterized in that the casing includes a double wall portion being substantially a cuboid in shape, including a U-shaped bottom and a U-shaped cover where an angled part of said U-shaped bottom and an angled part of said U-shaped cover form a double wall portion of the casing with an inner wall portion and an outer wall portion defining an air duct between the inner wall portion and the outer wall portion and leading from a front surface to a rear surface of said casing,

(f) and said casing being built such that said heat generating component is in thermal contact with the inner wall portion when the electric circuit is in place and that an air flow produced by said at least one fan is directed through said air duct, said double wall portion being a heat sink of the ~~electrical~~ electric device.

13. (Previously presented) The device according to claim 1, characterized in that said casing is aluminum.

14. (Previously presented) The casing according to claim 12, characterized in that said casing is made of a metal with a high coefficient of thermal conductivity.

15. (Currently amended) The casing according to claim 12, characterized in that ~~said casing is substantially a cuboid in shape and includes a~~ said bottom and ~~[[a]] said cover are~~ fitted together in thermal contact, said inner wall portion being a part of said bottom, said outer wall portion being a part of said cover, said circuit being implemented on a printed circuit board and the printed circuit board being mounted on the bottom.

16. (Currently amended) The casing according to claim 15, characterized in that it includes thermal paste between contacting parts of the bottom and the cover, said bottom and said cover being ~~serewed~~ fastened together by fasteners.

17. (Previously presented) The casing according to claim 15, characterized in that said bottom includes a base plate and a bottom side plate and in that said cover includes a top plate and a cover side plate, said bottom side plate forming said inner wall portion, said cover

side plate forming said outer wall portion and said printed circuit board being mounted substantially parallel to said base plate.

18. (Currently amended) The casing according to claim 17, characterized in that said cover side plate forms a lateral surface of said ~~eubical~~ cuboid casing, ~~said air duct leading from a front surface to a rear surface of said cubical casing.~~

19. (Currently amended) The casing according to claim 18, characterized in that ~~said air duct has an inlet,~~ said inlet ~~being~~ is formed by an end portion of said bottom side plate that is bent to an inner side of the casing to increase the air flow through said air duct, said at least one fan being arranged on the front surface of said ~~eubical~~ cuboid casing covering said inlet at least partially.

20. (Previously presented) The casing according to claim 12, characterized in that an additional heat sink is mounted within the air duct, being in thermal contact with said double wall portion.

21. (Previously presented) The casing according to claim 12, characterized in that it receives at least two fans, the casing including a second double wall portion with an inner wall portion and an outer wall portion defining a second air duct, said second double wall portion being a second heat sink and said at least two fans being arranged such that an air flow produced by said at least two fans is directed through said air ducts respectively.

22. (Currently amended) The casing according to claim 21, characterized in that ~~said casing is substantially a cuboid in shape and has two lateral surfaces,~~ each air duct ~~being~~ is arranged along one of said lateral surfaces respectively and ~~leading~~ leads from a front surface of the ~~eubical~~ cuboid casing to a rear surface of the ~~eubical~~ cuboid casing.

23. (Previously presented) The casing according to claim 14, characterized in that said casing is aluminum.

24. (New) An electrical device including a casing, an electric circuit with a heat generating component and at least one fan, the heat generating component being in thermal contact with a wall portion of the casing, the casing including a double wall portion with an inner

wall portion and an outer wall portion defining an air duct between the inner wall portion and the outer wall portion, said heat generating component being in thermal contact with the inner wall portion, said double wall portion being a heat sink and said at least one fan being arranged such that an air flow produced by said at least one fan is directed through said air duct, said casing being substantially a cuboid in shape and including a bottom and a cover fitted together in thermal contact, said inner wall portion being a part of said bottom, said outer wall portion being a part of said cover, said circuit being implemented on a printed circuit board and the printed circuit board being mounted on the bottom, said bottom including a base plate and a bottom side plate, said cover including a top plate and a cover side plate, said bottom side plate forming said inner wall portion, said cover side plate forming said outer wall portion and said printed circuit board being mounted substantially parallel to said base plate, said cover side plate forming a lateral surface of said substantially cuboid casing, said air duct leading from a front surface to a rear surface of said casing, said air duct having an inlet, said inlet being formed by an end portion of said bottom side plate that is bent to an inner side of the casing to increase the air flow through said air duct, and said at least one fan being arranged on the front surface of said substantially cuboid casing covering said inlet at least partially.

25. (New) A casing for an electrical device of the kind including an electric circuit with a heat generating component and at least one fan, the casing characterized in that the casing includes a double wall portion with an inner wall portion and an outer wall portion defining an air duct between the inner wall portion and the outer wall portion and being built such that said heat generating component is in thermal contact with the inner wall portion when the electric circuit is in place and that an air flow produced by said at least one fan is directed through said air duct, said double wall portion being a heat sink of the electrical device, the casing receiving at least two fans, the casing including a second double wall portion with an inner wall portion and an outer wall portion defining a second air duct, said second double wall portion being a second heat sink and said at least two fans being arranged such that an air flow produced by said at least two fans is directed through said air ducts, respectively, and said casing being substantially a cuboid in shape and having two lateral surfaces, each air duct being arranged along one of said lateral surfaces respectively and leading from a front surface of the cuboid casing to a rear surface of the cuboid casing.